

- †***C. roemeri***  
Meyer, 1852
- †***C. elegans***  
(Wagner, 1861) [originally  
*Pterodactylus*]

mainly by the presence of a crest along the snout, which has since been shown to be a feature related to growth or sex, rather than species.<sup>[4]</sup>

A fourth species of *Ctenochasma* was first described (but not named) by Philippe Taquet in 1972.<sup>[5]</sup> A single specimen, consisting of a partial skull with complete brain case, was found in France and housed in the collections of the Saint-Dizier Museum. Detailed comparison to other *Ctenochasma* specimens in 2004 confirmed that it was a new species.<sup>[6]</sup> In honor of Taquet's work on the specimen, Christopher Bennett named the species *C. taqueti* in 2007.<sup>[7]</sup>

Although researchers in the late 1990s and early 2000s, including Bennett and Jouve, suggested that all these species probably represented growth stages on just one kind of *Ctenochasma*, in a more comprehensive 2007 study, Bennett demonstrated that three distinct species could be recognized based on the number and slenderness of the teeth, which varied across all growth stages. *C. roemeri*, the earliest species, is characterized by its relatively low number of only moderately slender teeth. The later *C. taqueti* had a moderate number of slender teeth, and the last species, *C. elegans*, had a high number of very slender teeth. These three species, arranged chronologically, probably represent a single evolutionary lineage in which the filter-feeding apparatus was gradually refined.<sup>[7]</sup>

■ † <i>C. taqueti</i> Bennett, 2007
Synonyms
<b>Genus synonymy</b> <ul style="list-style-type: none"><li>■ <i>Ptenodracon</i> Lydekker, 1888</li></ul>
<b>Synonyms of <i>C. elegans</i></b> <ul style="list-style-type: none"><li>■ <i>Ornithocephalus brevirostris</i> Sömmerring, 1817</li><li>■ <i>Pterodactylus brevirostris</i> (Sömmerring, 1817)</li><li>■ <i>Ptenodracon brevirostris</i> (Sömmerring, 1817)</li><li>■ <i>Pterodactylus elegans</i> Wagner, 1861</li></ul>

## Description



Fossil skull of a subadult *C. elegans*

*Ctenochasma* is distinguished mainly by its numerous (over 400 in adults) long, thin, curved and closely packed teeth, which lined its elongated and narrow snout. The teeth were so closely packed that they formed a comb, and in adults they projected outward away from the jaws, forming a basket; traditionally, these are thought to indicate a filter feeding lifestyle, straining water through the teeth in order to capture and eat small invertebrates, but unlike the related *Pterodaustro* it lacks adaptations that would form a pumping mechanism. Instead, the spatulate profile formed by the teeth probably indicate a spoonbill-like lifestyle, increasing the surface area of the jaws in order to catch small prey.<sup>[8]</sup> The snout curved slightly upward and was rounded at the tip, and the teeth were restricted to the front half of the jaws.<sup>[6]</sup>

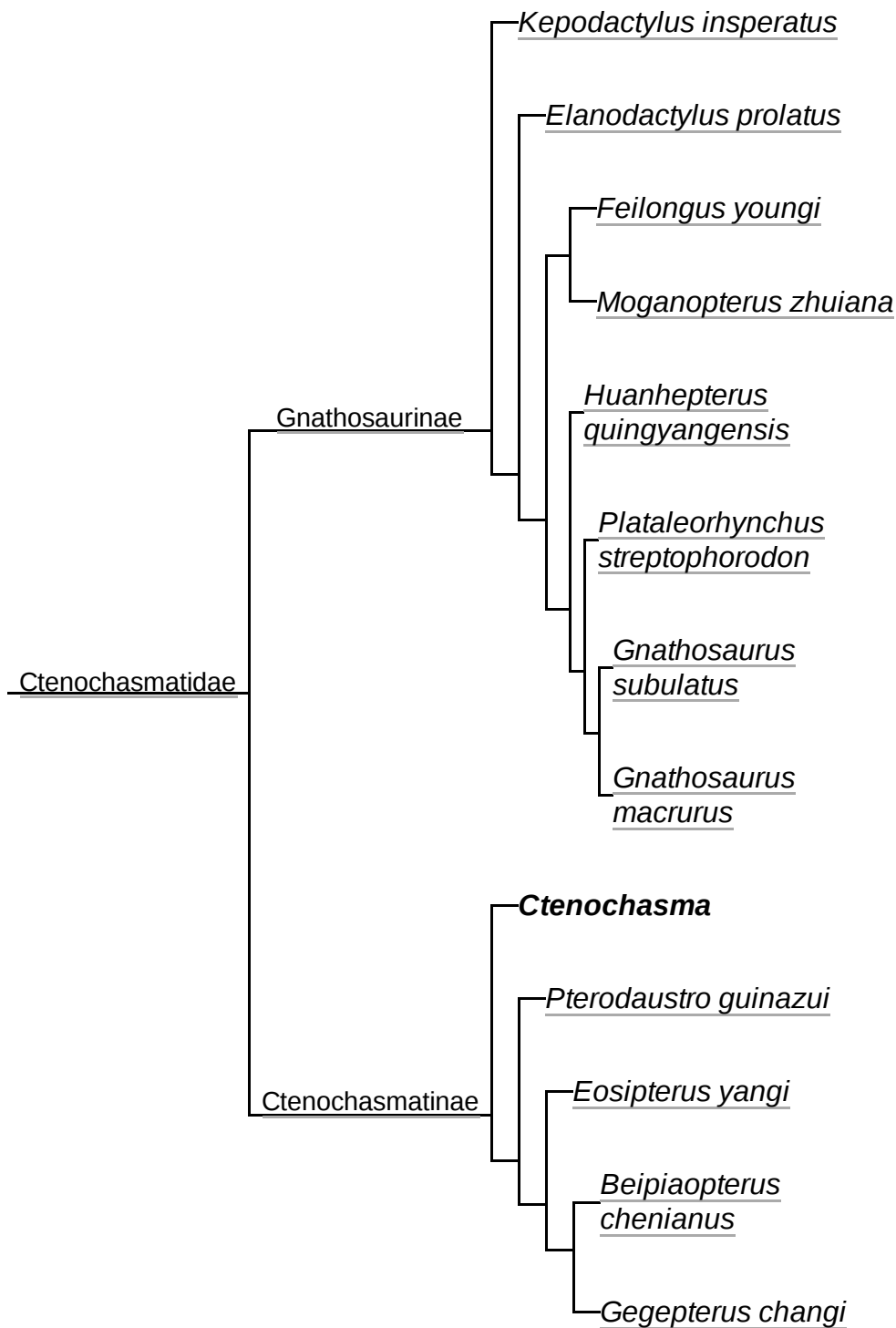
The smallest species, *Ctenochasma elegans*, had a wingspan of only about 25 centimetres (9.8 in). *Ctenochasma* is distinguished by its mouth which contained as many as 260 long, thin comb-like teeth. Adult *Ctenochasma* had a bony crest along the skull, though this is not found in juveniles.<sup>[4]</sup>

Comparisons between the scleral rings of both *Ctenochasma elegans* and *Ctenochasma taqueti* and modern birds and reptiles suggest that these taxa may have been nocturnal, and may have had activity patterns similar to modern nocturnal seabirds. This may also indicate niche partitioning with contemporary pterosaurs inferred to be diurnal, such as *Pterodactylus* and *Scaphognathus*.<sup>[9]</sup>

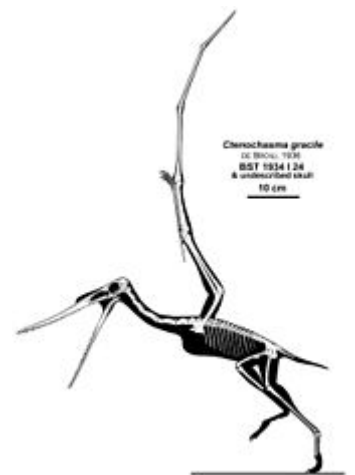
Compared to other ctenochasmatooids, it had larger wings, and may have displayed a flying style comparable to that of modern skuas.<sup>[8]</sup>

# Classification

Cladogram following Andres, Clark & Xu, 2014.<sup>[10]</sup>



Fossil specimen of a young juvenile *C. elegans*



Skeletal reconstruction

## See also

- [List of pterosaur genera](#)
- [Timeline of pterosaur research](#)

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